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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,343

10/28/2003

Mitsuaki Oshima

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513 7590 10/11/2007  
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EXAMINER

PHU, PHUONG M

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/694,343

**Applicant(s)**

OSHIMA, MITSUAKI

**Examiner**

Phuong Phu

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 39,40,45,46,51,52,57,58,63,64,69,70,75,76,81 and 82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51,52,57,58,75,76,81 and 82 is/are allowed.
- 6) ☒ Claim(s) 39,40,45,46,63,64,69 and 70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/037,108.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/28/03, 12/21/05, 2/7/07, 7/12/07.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 8/8/07. Accordingly, claims 39, 40, 45, 46, 51, 52, 57, 58, 63, 64, 69, 70, 75, 76, 81 and 82 are currently pending; and claims 1-38, 41-44, 47-50, 53-56, 59-62, 65-68, 71-74, 77-80, 83-86 are canceled.

#### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 39, 40, 45, 46, 69 and 70 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 39, 41, 48, 50, 84 and 86, respectively, of copending Application No. 10/695,780. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

-Regarding claim 39, claim 39 of Application No. 10/695,780 teaches a telephone for transmitting an uplink signal to a base station and receiving a first downlink signal and a second downlink signal from the base station, comprising:

a modulator operable to modulate a first data stream according to a QPSK to produce a modulated signal;

a transmitter operable to transmit the modulated signal as the uplink signal;

a receiver operable to receive the first downlink signal and the second downlink signal, wherein the first downlink signal has information of a first data stream and the second downlink signal has information of a second data stream, the first downlink signal is modulated according to a QPSK and the second downlink signal is modulated according to an n-level PSK or an n-level QAM, wherein the first data stream includes information representing the value of n, or in another word, the first down link signal has data for demodulation of the second downlink signal, the data for demodulation being the information representing the value of n; and

a demodulating device (comprising elements “descrambler” and “demodulators”) operable to demodulate the first downlink signal to produce a demodulated first data stream inherently comprising the data for demodulation, and demodulate the second downlink signal to produce the second data stream, wherein the second data stream is produced according to the value of n, or namely according to the data for demodulation, (the demodulating device considered here equivalent with the limitation “demodulator”);

wherein a data rate “second error correction code rate” of the second downlink signal is changeable.

-Regarding claim 40, claim 41 of Application No. 10/695,780 teaches that n is integer and equal to or greater than 4.

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-Regarding claim 45, claim 48 of Application No. 10/695,780 teaches a telephone for transmitting an uplink signal to a base station and receiving a first downlink signal and a second downlink signal from the base station, comprising:

a modulator operable to modulate a first data stream according to a QPSK to produce a modulated signal;

a multiplexer operable to convert the first-modulated signal to a CDMA converted signal according to CDMA;

a transmitter operable to transmit the CDMA converted signal as the uplink signal;

a receiver operable to receive the first downlink signal and the second downlink signal, wherein the first downlink signal has information of a first data stream and the second downlink signal has information of a second data stream, the first downlink signal is modulated according to a QPSK, and the second downlink signal is modulated according to an n-level PSK or an n-level QAM, wherein the first data stream includes information representing the value of n, or in another word, the first down link signal has data for demodulation of the second downlink signal, the data for demodulation being the information representing the value of n;

a de-multiplexer operable to convert the first downlink signal to a first de-multiplexed signal and convert the second downlink signal to a second de-multiplexed signal, according to CDMA; and

a demodulating device (comprising elements "descrambler" and "demodulator") operable to demodulate first de-multiplexed signal to produce a demodulated first data stream inherently

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comprising the data for demodulation and demodulate the second de-multiplexed signal to produce the second data stream, wherein the second data stream is produced according to the value of  $n$ , or namely according to the data for demodulation, (the demodulating device considered here equivalent with the limitation "demodulator");

wherein a data rate "second error correction code rate" of the second downlink signal is changeable.

-Regarding claim 46, claim 50 of Application No. 10/695,780 teaches that  $n$  is integer and equal to or greater than 4.

-Regarding claim 69, claim 84 of Application No. 10/695,780 teaches a transmission and receiving method for transmitting an uplink signal to a base station and receiving a first downlink signal and a second downlink signal from the base station, comprising:

when the uplink signal is transmitted from a telephone to the base station:

modulating a first data stream according to a QPSK to produce a first modulated signal;

multiplexing the modulated signal to a CDMA converted signal according to CDMA; and

transmitting the CDMA converted signal as the uplink signal; and

when the first and second downlink signals are transmitted from the base station to the telephone:

receiving the first downlink signal and the second downlink, wherein the first downlink signal has information of a first data stream and the second downlink signal has information of a

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second data stream, the first downlink signal is modulated according to a QPSK, and the second downlink signal is modulated according to an  $n$ -level PSK of an  $n$ -level QAM, wherein the first data stream includes information representing the value of  $n$ , or in another word, the first downlink signal has data for demodulation of the second downlink signal, the data for demodulation being the information representing the value of  $n$ ;

demultiplexing the first downlink signal to produce a first de-multiplexed signal "de-multiplexed first downlink" and demultiplexing the second downlink signal to produce a second de-multiplexed signal "demultiplexed second downlink signal", according to CDMA; and

demodulating the first de-multiplexed signal to produce the demodulated first data stream and demodulating the second de-multiplexed signal (by a process of "descrambling" and "demodulating" the second downlink signal) to produce the second data stream "demodulated second data stream", wherein the second data stream is produced according to the value of  $n$ , or namely according to the data for demodulation;

wherein a data rate "second error correction code rate" of the second downlink signal is changeable.

-Regarding claim 70, claim 86 of Application No. 10/695,780 teaches that  $n$  is integer and equal to or greater than 4.

4. Claims 63 and 64 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 75 and 77, respectively, of copending Application No. 10/695,780, in view of claim 84 of Application No. 10/695,780.

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-Regarding claim 63, claim 75 of Application No. 10/695,780 teaches a transmission and receiving method for transmitting an uplink signal to a base station and receiving a first downlink signal and a second downlink signal from the base station, comprising:

when the uplink signal is transmitted from a telephone to the base station:

modulating a first data stream according to a QPSK to produce a modulated signal;

transmitting the modulated signal as the uplink signal; and

when the first and second downlink signals are transmitted from the base station to the telephone:

receiving the first downlink signal and the second downlink signal, wherein the first downlink signal has information of a first data stream and the second downlink signal has information of a second data stream, the first downlink signal is modulated according to a QPSK, and the second downlink signal is modulated according to an n-level PSK or an n-level QAM, wherein the first data stream includes information representing the value of n, or in another word, the first down link signal has data for demodulation of the second downlink signal, the data for demodulation being the information representing the value of n; and

demodulating the transmission first downlink signal to produce a demodulated first data stream inherently including the data for demodulation and demodulating the second downlink signal (by a process of “descrambling” and “demodulating” the second downlink signal) to produce the second data stream, wherein the second data stream is produced according to the value of n, or namely according to the data for demodulation.



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Claim 75 does not teach that a data rate of the second downlink signal is changeable.

In a similar endeavor, claim 84 of Application No. 10/695,780 teaches that a data rate “second error correction code rate” of the second downlink signal is changeable.

For an application, it would have been obvious for one skilled in the art to implement the invention in claim 75 of Application No. 10/695,780 in such a way that a data rate “second error correction code rate” of the second downlink signal is changeable, as taught by claim 84 of Application No. 10/695,780, so that with such the implementation, the invention of claim 75 in view of claim 84 of Application No. 10/695,780 would become another derived embodiment invention.

-Regarding claim 64, claim 77 of Application No. 10/695,780 teaches that  $n$  is integer and equal to or greater than 4.

***Allowable Subject Matter***

5. Claims 51, 52, 57, 58, 75, 76, 81 and 82 are allowed.

***Response to Arguments***

6. Applicant's arguments filed on 8/8/07 have been fully considered.

-As a result, the previous objections on the IDS filed on 12/21/05 and 10/28/03 have been withdrawn.

-As a result, the previous objections on the Priority have been withdrawn.

-As a result, the previous objections on the Specification have been withdrawn.

-As a result, the previous objections on the Drawings have been withdrawn.

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- As a result, the previous rejections on the Double Patenting have been withdrawn.
- As a result, the previous rejections, under 35 USC 102 and 103, have been withdrawn.
- As a result, claims 51, 52, 57, 58, 75, 76, 81 and 82 are indicated allowable as set forth above.

-However, claims 39, 40, 45, 46, 63, 64, 69 and 70 are deemed not allowable because of reasons set forth above in this Office Action.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

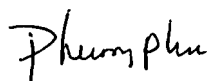
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Phuong Phu  
09/26/07

**PHUONG PHU**  
**PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2611